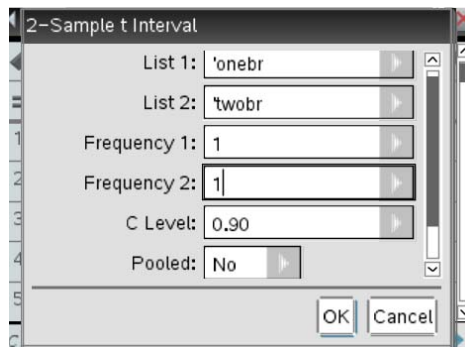


## 25. Two-sample $t$ intervals on the calculator

You can use the two-sample  $t$  interval command on the TI-Nspire to construct a confidence interval for the difference between two means. Let's look at the steps using the data from "Do bigger apartments cost more money?" on page 649.

- Insert a *Lists & Spreadsheet* page: Press **(ctrl)** **[I]** and select *Add Lists & Spreadsheet*.
- Name the first column **onebr** and the second column **twobr**.
- Arrow down to enter the rent of 1-bedroom apartments in the first column and 2-bedroom apartments in the second column.
- Press **(menu)**  $\rightarrow$  *Statistics*  $\rightarrow$  *Confidence Intervals*  $\rightarrow$  *2-Sample  $t$  interval*.
- In the first dialogue box, select Data in the drop-down menu. **(tab)** to **[OK]** and press **(enter)**. A dialogue box will appear.
- Enter the values as shown in the box. For C level, enter 0.90. For pooled: choose "No." **(tab)** to **[OK]** and press **(enter)**.

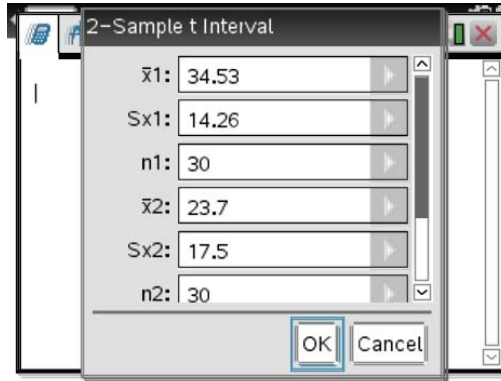


- To see the results you may need to scroll to the right.

	B	C	D	E
	twobr			=tInterval
1		595	Title	2-Samp...
2		500	CLower	-144.802
3		580	CUpper	-11.1984
4		650	$\bar{x}$ Diff	-78.
5		675	ME	66.8016

You can also use the TI-Nspire to construct a confidence interval for the difference between two means from sample statistics. Let's review the steps using the sample statistics from "Big Trees, Small Trees, Short Trees, Tall Trees" on page 652.

- Press  $\left[\frac{\square}{\square}\right]$  (or  $\left[\frac{\square}{\square}\right]$  on **A**) to insert a *Calculator Scratchpad*.
- Press  $\left[\text{menu}\right] \rightarrow \text{Statistics} \rightarrow \text{Confidence Intervals} \rightarrow \text{2-Sample } t \text{ interval}$ .
- In the first dialogue box, select *Stats* in the drop-down menu.  $\left[\text{tab}\right]$  to  $\left[\text{OK}\right]$  and press  $\left[\text{enter}\right]$ . Another dialogue box will appear.
- Enter the summary statistics as shown.



- For C level, enter 0.90. For pooled: choose "No."  $\left[\text{tab}\right]$  to  $\left[\text{OK}\right]$  and press  $\left[\text{enter}\right]$ .

